

Contour Buffer Strips

Vermont Conservation Practice Job Sheet

332



Definition

Contour Buffer Strips are narrow strips of perennial, herbaceous vegetative cover established across the slope and alternated down the slope with wider cropped strips.

Purpose

- To reduce sheet and rill erosion.
- To reduce transport of sediment and other water-borne contaminants down-slope, on-site or off-site.
- To enhance upland wildlife habitat.

Where used

This practice applies on cropland and is most suitable on uniform slopes ranging from 4 to 8 percent. The narrow strips of permanent vegetative cover are not a part of the normal crop rotation.

Conservation Management System

Rarely does one conservation practice provide the treatment needed for all of our natural resources. Contour buffer strips are components of conservation management systems, a combination of conservation practices and management that achieve a level of treatment for our soil, water, air, plant, and animal resources while also meeting the objectives of the land user. Examples of other practices often needed include: Conservation Crop Rotation, Cover Crop, Grassed Waterways, Nutrient Management, and Pest Management.

General Specifications

- Cropped strips will be alternated with contour buffer strips down the hill slope.
- Surface flow of water from contoured crop rows will be directed to a stable outlet.



- Plants will be selected on the basis of species characteristics, site and soil conditions, and the needs and desires of the land user.
- There are many ways to plant, establish, and manage suitable perennial vegetation on contour buffer strips. Pasture and hayland planting methods may be adequate on some sites. On critically eroding areas, critical area planting may be needed.
- Good seed and/or vegetative material is needed. Follow recommended planting rates and optimum planting dates. Inoculate all legume seed with the proper strain of bacteria.
- Adequate lime and fertilizer will be applied according to a nutrient management plan.
- A good seedbed will be prepared.

Operation and Maintenance

- Conduct all farming operations parallel to the strip boundaries except on headlands and end rows.
- Redistribute sediment accumulations over the cultivated strip to maintain uniform sheet flow of water.
- Spot seed or totally renovate buffer strip areas damaged by herbicide applications, equipment, or unusual rainfall events.
- Renovate vegetated headlands and end rows to keep ground cover above 65 per cent.
- Follow soil test and nutrient management guidelines for lime and fertilizer needs.
- Control undesired weed species, especially noxious weeds.
- Mowing will maintain appropriate vegetative density and height for optimum trapping of sediment.
- Where enhancement of wildlife habitat is a planning goal of the land user, mow only after the desired species of ground nesting birds have hatched (August 1st in Vermont).

Contour Buffer Strips – Job Sheet

Specifications

Specifications are prepared in accordance with the Vermont NRCS Field Office Technical Guide and the Contour Buffer Strip practice standard (332). Information on this job sheet is considered to be part of the conservation plan.

Client Name:		Farm #:	
Field(s):		Tract #:	
Designed By:		Date:	

Purpose: Check all that apply	
To reduce sheet and rill erosion	To enhance upland wildlife habitat
To reduce transport of sediment and other water-borne contaminants downslope, on-site, or off-site	Other (specify):

Note: When the practice is being applied to reduce sheet and rill erosion, refer to Table 1:

TABLE 1. Maximum Cropped Strip Width (Feet)

Land Slope	Hydrologic Soil Groups			
(%)	A	B	C	D
1 to 4	300	230	200	190
5 to 6	200	180	150	120
7 to 8	130	110	100	90

A maximum of 15 percent deviation of the maximum cropping strip width shall be allowed to accommodate equipment widths.

Cropped strips shall be of uniform width between buffer strips and not exceed the lesser of:

- (1) 50 percent of the slope length (L), used for the erosion calculation, or
- (2) 50 percent of the critical slope length for the contour buffer strips. (The critical slope is calculated by multiplying 1.5 times the critical slope length for contour farming as determined by using approved erosion prediction technology.

Table 2 Contour Buffer Strip Location and Layout Info	Field #	Field #	Field #	Field #	Field #
	Strip #	Strip #	Strip #	Strip #	Strip #
Land Slope %					
Hydrologic Soil Group					
Cultivated Strip Width					
Buffer Strip Width					
Buffer Strip Length					
Acres of Buffer Strip					

Table 3 Contour Buffer Strip Planting Specifications						
Field Number:	Contour Strip Number:	Plant Species To Be Established:	Seeding Dates:	Seeding Rate (lb/ac):	Lime (tons/ac)	Fertilizer Recommendation

Additional Comments:

